

HYBRID SERIES

GEN-LB-US 16K

- 3 MPPTs with 5 strings input, Max. 21kW PV input
- 200A grid passthrough for whole home backup
- Supports up to 10pcs in parallel for on/off grid
- Peak shaving function
- Auto start/stop, works with battery and PV for load support.
- AC coupling function to retrofit the existing grid-tied system
- Remote Monitoring & AI Optimization



Model	GEN-LB-US 16K
Input (PV DC)	
Max. PV array power (W)	25000
Max. PV input power (W)	21000
Rated PV input voltage (V)	360
Number of independent MPPT inputs	3 / (2:2:1)
Max. PV input voltage (V)	550
MPPT voltage range (V)	120 ~ 440
Start-up voltage (V)	140
Max. PV input current per MPPT (A)	26 / 26 / 15
Max. PV short-circuit current input per MPPT (A)	31 / 31 / 19
Battery	
Compatible battery type	Lithium-ion / Lead-Acid
Rated battery voltage (V)	48
Battery voltage range (V)	40 ~ 60
Max. charging / discharging current (A)	250
Max. charging / discharging power (W)	12000
Force wake up battery from PV function	YES
Grid	
Rated AC voltage (V)	120 / 240 ; 120 / 208
Rated AC frequency (Hz)	50 / 60
Rated AC output current with PV (A)	66.7
Rated AC output power with PV (W)	16000@240V / 13800@208V
Max. AC input current (A)	200
THDI	<3%
Max. continuous AC passthrough current (A)	200
GEN	
Rated GEN voltage (V)	120 / 240 ; 120 / 208
Rated GEN frequency (Hz)	50 / 60
Rated GEN input current (A)	62.5
Max. GEN input current (A)	80
Rated GEN input power (W)	15000
UPS	
Rated output power (W)	12000
Rated output voltage (V)	120 / 240 ; 120 / 208
Rated output current (A)	50@240V ; 57.7@208V
Rated output frequency (Hz)	50 / 60
Surge power, duration	2 × rated power for 0.5s
Switching time	20 ms
Wave form	Sine wave
THDV	< 3%
Efficiency	
Max. MPPT efficiency	99.9%
Max. efficiency	97.5%
Battery charge / discharge efficiency	94.0%
CEC efficiency	96.9%
Protection	
PV reverse polarity protection	YES
Over current / voltage protection	YES
Anti-islanding protection	YES
AC short-circuit protection	YES
Leakage current protection	YES
DC switch	YES
AC / DC surge protection	Type III
Rapid shut down	YES
Grid / AFCI / RSD monitoring	YES
Load breaker	200A
Battery breaker	400A / 80V
General	
Dimensions (W × H × D)	566 × 893 × 285 mm / 22.3 × 35.2 × 11.2 in
Weight	57 kg / 125.7 lbs
Ingress protection rating	IP66 / NEMA 4X
Relative humidity	0 ~ 100%
Operating environment temperature range (°C)	-25 ~ 60°C, > 45°C Derating
Storage temperature range (°C)	-25 ~ 60
Display & Communication interface	Touch color screen, RS485 / Wi-Fi / CAN
Warranty	5 / 10 years
Cooling method	Smart Cooling
Topology	Transformer-less
Max. Operating Altitude (m)	2000
Standards & Certification	

UL 1741SA, UL 1741SB, CSA C22.2, CEC, FCC Part15B, IEEE 1547.1, HECO SRD V2.0